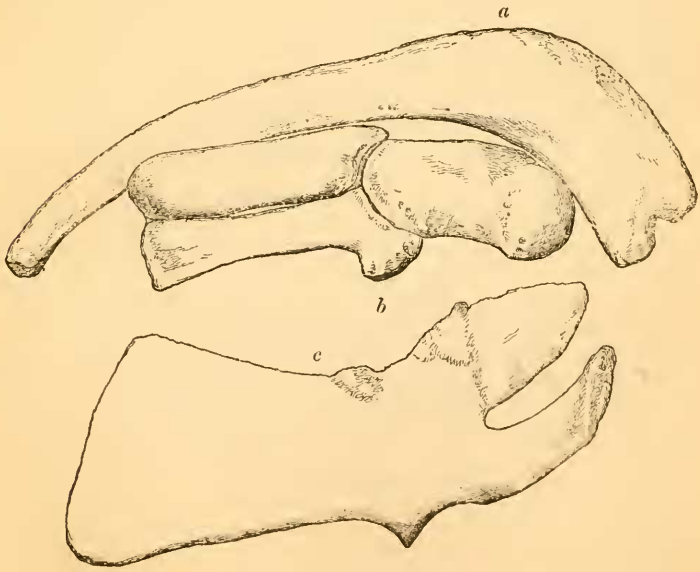
XXXVIII.—*Additional Notes on the Skeleton of* Dioplodon sechellensis. By Dr. J. E. Gray, F.R.S. &c.

Mr. Krefft has kindly sent me additional photographs of the skeleton of this animal in the Australian Museum, the skeleton of the body of which was figured in the 'Annals and Magazine of Natural History,' 1870, vol. vi. p. 343. It was obtained from near Lord Howe's Island.

Mr. Krefft complains that the figure taken from his photograph does not quite correctly represent the form of the tooth. The fact is, he fears that what is intended for shadow may be taken for the form, so that the tooth may be believed to be not so much exserted as it is in nature, and impressed with a longitudinal groove, as if it had two fangs. This is certainly not the case; and I do not think that any one would be deceived; and the photograph, representing the tooth of a larger size, gives the same shadows; and you cannot represent in woodcuts all the details of the photograph. Mr. Krefft has sent me photographs of some of the dorsal vertebræ, of a caudal vertebra with the chevron bone attached, and the second rib, which is broad at the upper end and gradually narrowed towards the thoracic end; he observes that the first rib is very small. The imperfect scapula, which has lost its upper front edge, is very



a. The second rib. *b*. The upper and forearm bones.
c. The scapula (imperfect).

peculiar for having very large coracoid and acromion processes, the latter being broad, compressed, and lanceolate; and the body of the scapula is small in comparison with these processes.

The upper arm-bone is subcylindrical and slightly curved, nearly as long as the ulna and radius, which are compressed and parallel, having only a linear suture between them.

He says the carpal bones were nearly all lost, and only one or two of the digital bones were obtained; but, in a letter written three or four days afterwards, he states that he is going to send me a photograph of the scapula and paddle restored as well as the materials will allow.

BIBLIOGRAPHICAL NOTICES.

Recherches anatomiques et physiologiques sur les Champignons. Par J. B. Carnoy. (Bulletin de la Société Royale de Botanique de Belgique, tome ix. p. 157.)

It would seem, from some remarks at the close of the paper of which the title is given above, that it is intended to form one of a series. Although nominally embracing Fungi in general, it relates only to the *Mucorineæ*, and for the most part to a single species, supposed to be new, and which is called *Mucor romanus**. The author's remarks upon the polymorphism of this *Mucor* (that is, the number of phases which it assumes at different periods) are curious, and, if confirmed, will be of considerable importance. The paper is of great length; and in what follows an attempt has been made to give a concise summary of the author's views of the polymorphism of the species, without entering into the minutiæ of its anatomical and physiological details.

It would, M. Carnoy says, be a great mistake to suppose that the life of the *Mucorineæ* is confined within the narrow circle of a mycelium and a mucorinean fructification. Under certain conditions the *Mucorineæ* assume all the characters of the *Mucedineæ*; or, in other words, they have two lives or phases, a *mucorinean* and a *mucedinous*. The *mucorinean* phase has also its primary and secondary forms, of which the primary one is the normal well-known form of *Mucor*. The secondary forms are very numerous, but may be divided into two great groups:—1, sporangial forms, in which the sporangia are abnormal but the spores of which reproduce the normal form of *Mucor*; 2, acrogenous forms, or those in which, instead of sporangia, macroconidia are produced.

These macroconidia are of rare occurrence, and often will not germinate; but in experiments made with the spores of *Mucor romanus* it was found that when sown upon the heads of fish which

* The plant was discovered in a dark cave at Rome.